

3M Electronic Interconnects

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CABLE

External Wiring

3659 Series

.050" Round, Shielded/Jacketed, Flat Cable, 28 AWG Stranded, Mass-Term, PVC/PVC

Technical Drawing

To Order Product



- Round construction permits easier routing
- 28 AWG wire on .050 inch pitch permits mass termination to broad line of IDC connectors
- Continuous split/bond repeat allows for mass termination on 2.4 inch centers (approximate)
- Primary cable is zippable for branching or discrete terminations
- Meets external wiring requirements of National Electrical Code, Article 725 (CL2)
- UL listed for USA and Canadian markets
- Dual shielding provides 35db average shielding effectiveness

PHYSICAL

Insulation

Material: Polyvinyl Chloride (PVC)

Color: Black

Primary Material: PVC

Color: Gray

Marking

Standard: (UL) CL2 75C 28 AWG or AWM 20267

3M NU

3M AWM IIA/B 80C 300V FT1

EU <50V

Conductors: 28 AWG 7 x 36 [7 x 0.127]

Tinned Stranded Copper

Shielding: .001 [0.03] Thick

Aluminum/Polyester Film Foil and

90% Coverage Tinned Copper

Braid

ELECTRICAL

Voltage Rating: USA N.E.C. 725, CL2 or AWM;
300 V
Canada: 300 V
EU: <50 V

Insulation > $1 \times 10^{10} \Omega/10 \text{ ft. [3m]}$

Resistance:

	Unbalanced	Balanced
Characteristic Impedance:	62 Ω	106 Ω
Capacitance:	27.7 pF/ft. [90.88 pF/m]	15.2 pF/ft. [49.9 pF/m]
Inductance:	.13 $\mu\text{H/ft.}$ [0.43 $\mu\text{H/m}$]	.20 $\mu\text{H/ft.}$ [0.66 $\mu\text{H/m}$]
Propagation Delay:	1.72 ns/ft. [5.64 ns/m]	1.62 ns/ft. [5.32 ns/m]
Velocity of Propagation:	59%	62%

Note: Unbalanced is measured between ground-signal-ground conductors with shield grounded. Balanced is measured between signal conductors within a pair, with the shield floating.

ENVIRONMENTAL

Temperature Rating: USA: CL2; 75°C Max or AWM; -20°C to +80°C
Canada: 80°C

Flammability Rating: USA: UL: N.E.C. 725, CL2
Canada: FTI

UL File No.: E118773, Power Limited Circuit Cable: CL2
(or AWM Style 20267)

Revision 14

For Assembly equipment info call 1-800-225-5373

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